

SECURITY AND COMMUNICATIONS SYSTEMS

WHEN TO CONSIDER

| | | | |
|-------------------|-------|--------------------|------|
| NEEDS ASSESSMENT | NO | SCHEMATIC DESIGN | YES |
| MASTER PLANNING | NO | DESIGN DEVELOPMENT | YES |
| PROJECT STATEMENT | MAYBE | CONSTRUCTION | |
| ARCHITECTURAL | | DOCUMENTS | DONE |
| PROGRAMMING | MAYBE | CONSTRUCTION | DONE |

NO-Need not consider.
MAYBE-This system may be considered.
YES-This system should be considered.
DONE-This system should have already been considered.

DESCRIPTION

Your security and communications systems must work in concert throughout your facility. Many facets of these systems must be explored to properly tie them together while still meeting all of your needs. This section provides an Introductory look at telephone systems, security and administrative intercom systems, closed circuit television systems, public address systems and master antenna TV systems.

ALTERNATIVES

Telephone Systems

Many options are available. If you don't have the necessary expertise on your staff, consider hiring an outside communications consultant. Modern technology dictates use of a digital system In lieu of an analog system. Digital transmission opens up an entirely new communications dimension that employs not only voice, but data, video, text, graphics and the new world of Integrated Services Digital Network (ISDN). Determine the most cost-efficient system that not only will serve immediate needs, but also will meet the new technological requirements just over the horizon.

Your selection should answer the following questions:

- What type of system do you want?
- Do you need a totally independent on-premises system?
- Should it be part of an overall city, county or state PABX or a centrex system?
- Does it integrate 911 Emergency Services?
- Does it combine your voice and data requirements?
- Do you need to prepare a Request for Proposals to get competitive bidding?
- What does the local utility central office offer?
- Are the methods of data and voice transmission to off-site facilities microwave, fibre optics or hard wired?
- Will you use local or wide area network planning?

This difficult task requires careful planning, implementation and follow-up on an on-going basis.

Security And Administrative Intercom Systems

All correctional institutions use extensive intercom systems not only for inmate control, but also as a staff communications system. A well-thought-out and integrated system can reduce staffing and maintain the utmost in security and life safety. Specialized systems also exist for door control, inmate visiting and line-up, nurse call systems and overall monitoring systems. Systems also may be used for emergency or all calls to locate personnel in areas not normally equipped with public address systems.

Closed Circuit Television Systems

Closed circuit system design is critical. It should be designed in conjunction with intercom for maximum function. Obviously closed circuit TV is used for surveillance, door control, security and generally controlling key areas that require visual coverage. Unless this is closely investigated and planned properly, it can become an expensive system that in many cases is ignored or misused. Proper system design will greatly reduce maintenance costs which can get quite expensive.

Public Address Systems

Correctional facilities use a variety of public address systems primarily to locate personnel within a facility, as well as for emergency announcements and possibly background music. In certain cases, an intercom system used in inmate areas can also be used for public address. There is a tendency to overdesign PA systems with many zones of paging that are found non-functional for the intended purpose. Considering your desired end result, investigate clearly the basic functionality of any system considered.

Master Antenna TV Systems

An MATV system distributes TV signals throughout an institution as required for TV reception. Normally you provide this in inmate dayrooms and cells. Usually MATV systems are designed to receive all available local "off air" stations plus one or more channels from a VCR (Video Cassette Recorder/Player) for special or educational purposes. Normally, before design, on-site tests by qualified technicians are necessary to determine design parameters. Distribution methods vary. Methods considered for correctional facilities should reduce installation costs and help keep maintenance and vandalism at a minimum.

Other Systems And Issues

Other security and communication systems related to correctional facilities that you may want to explore include:

- Pneumatic (vacuum) tubes.

- Radio systems.
- Security detection microwave systems.
- Duress alarms.
- High-frequency radio antenna systems.
- Computer systems. (A related issue to consider is whether conduit should be run throughout the facility during construction in anticipation of future computer needs.)